

IN THE CLAIMS:

Claims 1, 2, 4 through 8 and 10 are presently pending in the above identified application. Claims 3, 9 and 11 have been previously cancelled without prejudice or disclaimer. Also, please amend Claims 1, 7, 8 and 10 as follows:

1. (Currently Amended) A magnetic recording apparatus, comprising:
a perpendicular magnetic recording medium having a soft magnetic underlayer and a magnetic recording layer;
a magnetic head including a recording head;
a signal processing circuit for converting user data into a recording data sequence on a sector block by sector block basis; and
a current driver for converting the recording data sequence into a recording current that is applied to the recording head, wherein
the signal processing circuit adds at the end of the recording data sequence for each sector block a repetition pattern of a minimum bit length for the particular block, and the repetition pattern comprises four or more bits of repetitions of magnetization inversion at the intervals of a minimum-bit length of a relevant sector includes more than two of the repeated minimum bit length.
2. (Original) The magnetic recording apparatus according to claim 1, wherein the signal processing circuit adds a repetition pattern of the minimum bit length after a postamble portion that follows an ECC portion.
3. (Cancelled)
4. (Original) The magnetic recording apparatus according to claim 1, wherein the length of the minimum bit length added is one byte or more.
5. (Original) The magnetic recording apparatus according to claim 1, wherein the recording head is a single pole type head having a main pole and an auxiliary pole.
6. (Original) The magnetic recording apparatus according to claim 1, wherein a minimum track pitch in the apparatus is 250 nm or less.

7. (Currently Amended) A perpendicular magnetic recording medium comprising a soft magnetic underlayer and a magnetic recording layer in which user data is recorded on a sector block by sector block basis, wherein, at the end of a recording data sequence in each sector block, a repetition pattern of a minimum bit length for the particular sector block is added, and the repetition pattern comprises four or more bits of repetitions of magnetization inversion at the intervals of a minimum-bit length of a relevant sector ~~includes more than two of the repeated minimum bit length~~.
8. (Currently Amended) The perpendicular magnetic recording medium according to claim 7, wherein the [[a]] repetition pattern of the minimum bit length is added after a postamble portion that follows an ECC portion in each sector block.
9. (Cancelled)
10. (Currently Amended) A method of recording information on a perpendicular magnetic recording medium comprising a soft magnetic underlayer and a magnetic recording layer using a recording head, the method comprising the steps of:
 - converting inputted user data into a recording data sequence;
 - adding a repetition pattern of a minimum bit length at the end of the recording data sequence, the repetition pattern comprising four or more bits of repetitions of magnetization inversion at the intervals of a minimum-bit length of a relevant sector ~~including more than two of the repeated minimum bit length~~;
 - converting the recording data sequence to which the repetition pattern of the minimum bit length is added at the end thereof into a recording current; and
 - driving the recording head with the recording current.
11. (Cancelled)